Listing of Claims:

Claims 1-6 (Canceled)

7.   (Currently Amended) The system according to claim ~~6~~ 12, wherein said setting means includes a reference detection mechanism for detecting the reference position and the reference angle.

Claims 8 and 9 (Canceled).

10.   (Currently Amended) The system according to claim ~~9~~ 12, wherein the rotation angle is calculated from the moving distance detected by the encoders corresponding to two of the wheels, which are distant with respect to the moving direction.

11.   (Previously Presented) The system according to claim 10, wherein said two wheels are most distant along a direction perpendicular to the moving direction of the wheels of the moving pedestal.

12.   (Currently Amended) ~~The~~ An image pick-up system ~~according to claim 9,~~ for picking up a real object image of an

object to be operated together with another image, said system

comprising:

5   a camera unit comprising a camera for picking up an image of

an object mounted on a moving pedestal via a pan head;

       calculating means for calculating a positional relationship

between the camera and the object;

       setting means for setting a reference position on a floor

10   surface on which the moving pedestal moves and a reference angle

of the moving pedestal and for inputting the reference position

and the reference angle to said calculating means; and

       detection means for detecting a moving amount of the moving

pedestal from the reference position, and a rotation angle of the

15   moving pedestal from the reference angle;

       wherein said calculating means calculates a position and an

angle of the camera with respect to the object based on the

reference position, the reference angle, the moving amount and

the rotation angle of the moving pedestal, and the calculating

20   means transmits data of the position and the angle of the camera

with respect to the object to a computer for operating together

the real object image of the object taken with the camera and

said another image based on the position and the angle of the

camera with respect to the object;

25   wherein said detection means detects the moving amount of

the moving pedestal by measuring a length of a portion of a wheel

of the moving pedestal, which has been brought into contact with

the floor surface;

    wherein the moving pedestal comprises at least three wheels

30   and said detection means includes at least three encoders each

for detecting a moving distance of a respective one of the

wheels;

    wherein the moving pedestal further comprises a roller in

contact with each of the wheels to be rotated together with the

35   wheel; [[,]] and

    wherein the moving distance of each of the wheels is

detected based on the number of rotations of the respective

roller and a pulse number counted by the respective encoder.

    Claim 13 (Canceled).

    14.   (Currently Amended) ~~The~~ An image pick-up system

~~according to claim 13,~~ for picking up a real object image of an

object to be operated together with another image, said system

comprising:

5   a moving pedestal including three wheels;

    a camera unit comprising a camera for picking up the real

object image of the object, which is mounted via a pan head on

said moving pedestal;

calculating means for calculating a positional relationship

10   between the camera and the object;

three encoders provided respectively corresponding to said

three wheels of said moving pedestal;

a plurality of sensors provided on said moving pedestal for

detecting a predetermined mark on a floor surface on which said

15   moving pedestal moves;

setting means for setting a reference position on the floor

surface and a reference angle of said moving pedestal, which are

determined based on detection values of said plurality of sensors

and pulse numbers counted by said encoders during movement of

20   said moving pedestal, and for inputting the reference position

and the reference angle to said operation means; and

detection means for detecting, based on the pulse numbers

counted by said encoders, a moving amount of the moving pedestal

from the reference position, and a rotation angle of the moving

25   pedestal from the reference angle;

wherein said calculating means calculates a position and an

angle of the camera with respect to the object based on the

reference position, the reference angle, the moving amount from

the reference position and the rotation angle from the reference

30   angle, which are obtained based on the pulse numbers counted by

said encoders, and transmits data of the position and the angle

of the camera with respect to the object to a computer for

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operating together the real object image of the object taken with
the camera and said another image based on the position and the
35   angle of the camera with respect to the object;
      wherein said detection means detects the moving amount of
the moving pedestal by measuring a length of a portion of a wheel
of the moving pedestal, which has been brought into contact with
the floor surface;
40   wherein the moving pedestal further comprises a roller in
contact with each of the wheels to be rotated together with the
wheel; [[,]] and
      wherein the moving distance of each of the wheels is
detected based on the number of rotations of the respective
45   roller and a pulse number counted by the respective encoder.

      15.   (New) The system according to claim 12, wherein a first
line and a second line are provided on the floor surface to
perpendicularly intersect at said reference position,
      wherein two first sensors for detecting the first line and
5   one second sensor for detecting the second line are provided on
the moving pedestal, and
      wherein said reference position and said reference angle are
found based on a position of each of the two first sensors at a
time when the two first sensors each pass said first line, and a

10   position of the second sensor at a time when said second sensor

      passes the second line.

      16.   (New) An image pick-up system for picking up an image

      of an object, said system comprising:

            a camera unit comprising a camera for picking up an image of

      an object mounted on a moving pedestal via a pan head;

5   calculating means for calculating a positional relationship

      between the camera and the object;

            setting means for setting a reference position on a floor

      surface on which the moving pedestal moves and a reference angle

      of the moving pedestal and for inputting the reference position

10   and the reference angle to said calculating means; and

            detection means for detecting a moving amount of the moving

      pedestal from the reference position, and a rotation angle of the

      moving pedestal from the reference angle;

            wherein said calculating means calculates a position and an

15   angle of the camera with respect to the object based on the

      reference position, the reference angle, the moving amount and

      the rotation angle of the moving pedestal, and the calculating

      means transmits data of the position and the angle of the camera

      with respect to the object to a computer for creating an image

20   containing a real object image of the object taken with the

      camera;

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wherein the moving pedestal comprises at least three wheels and said detection means includes at least three encoders each for detecting a moving distance of a respective one of the

25   wheels;

wherein the moving pedestal further comprises a roller in contact with each of the wheels to be rotated together with the wheel; and

wherein the moving distance of each of the wheels is

30   detected based on the number of rotations of the respective roller and a pulse number counted by the respective encoder.